

IMPROVED MEASUREMENT AND MONITORING SYSTEMS

ACCELERATED SITE TECHNOLOGY DEPLOYMENT PROJECT

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SCFA and DDFA Midyear Review**

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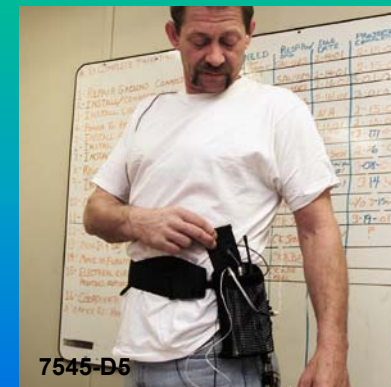
7543-D13

Remote Prismless Total Station Surveying Instrument



7500-3

Integrated Wireless Radon Monitoring System



7545-D5



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Project Goals

- Improve baseline method of measuring / monitoring, reduce cost and improve safety
- Technical approach: Put new tools in the hands of users
- Deploy technologies through gate 6 and in stage 7



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Addressing Thrust 1

End user needs addressed

- **Wireless Integrated Radon Monitoring**
 - Reduces personnel requirements
 - Increases efficiency
 - Improves performance
 - Reduces cost



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Addressing Thrust 1 (Cont.)

- **Remote Prismless Total Station**
 - Reduces personnel requirements
 - Increases efficiency
 - Improves safety
 - Reduces cost
- **Remote Physiological Monitoring System**
 - Improves safety
 - Increases efficiency



INTEGRATED WIRELESS RADON MONITORING SYSTEM

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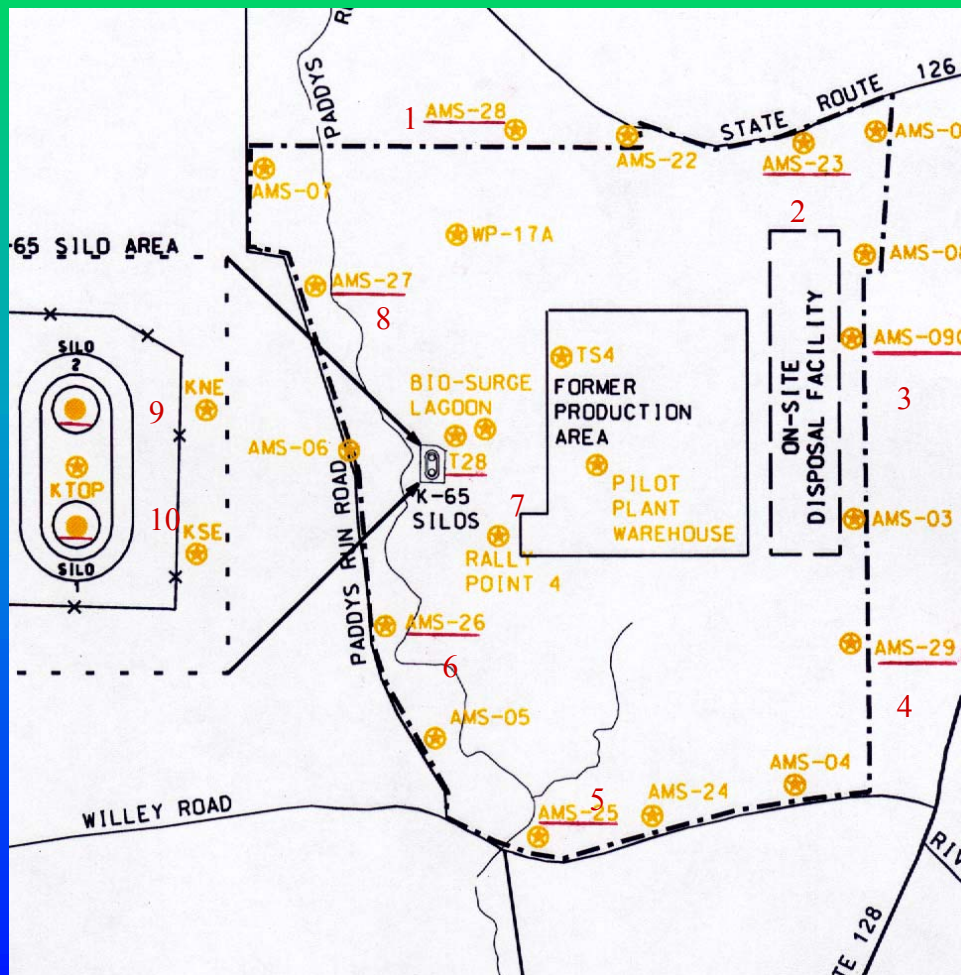




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Radon Monitors





REMOTE PRISMLESS TOTAL STATION

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REAL TIME PHYSIOLOGICAL MONITORING SYSTEM

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REAL TIME PHYSIOLOGICAL MONITORING SYSTEM

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Timeliness

End User Schedule Requirements

- Integrated Radon Monitoring
 - Increasing need to relocate monitors
 - Increasing need for Long Term Stewardship technology (LTS)
 - System was an important precursor activity for LTS
 - Compliments Fernald Post Closure Stewardship Technology Project
 - Now in baseline, deployed in time for technology to be included in the On Site Disposal Facility Monitoring system



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Timeliness (Cont.)

- Remote Prismless Survey System
 - Increasing survey needs as activities increase
 - Technology is now in baseline
- Personnel Monitoring
 - Technology is being deployed in time to incorporate into final baseline
 - Envisioned for Silos project, major work efforts requiring dress out in full PPE are still to come
 - Increasing D&D activities in coming years



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Benefits

- Integrated Radon Monitoring
 - Less personnel / vehicles required
 - More versatile
 - Improves data collection / reporting capabilities
 - Improves reliability
 - Provides real time data viewing



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Benefits (Cont.)

- **Remote Prismless Survey System**
 - Previous baseline was multi-person survey crew
 - Faster measurements - Paddy's Run creek bank sloughing
 - Improves safety and lowers cost
- **Personnel Monitoring**
 - Improves safety of the workers in PPE
 - May provide longer stay times in the future



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Technical Progress

- **Integrated Radon Monitoring**
 - Technology is now in baseline
 - Site purchased 18 additional survey station systems
 - Transitioning to complete remote operations
- **Remote Prismless Survey System**
 - Technology is now in baseline
 - Supports numerous projects through daily / weekly use



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Technical Progress (Cont.)

- **Personnel Monitoring**
 - In procurement
 - Planned for deployment this summer
 - Positive variance due to examining all available candidate technologies